

1.0 PURPOSE AND NEED

This chapter summarizes the need for transportation improvements along State Highway 75 (SH-75) in south central Idaho and describes the purpose of the project⁴. It was prepared in accordance with the U.S. Department of Transportation Federal Highway Administration (FHWA) environmental regulations contained in 23 CFR Part 771 *Environmental Impact and Related Procedures* and Technical Advisory 6640.8A *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*.

1.1 Summary Purpose and Need Statement

1.1.1 Purpose

The purpose of the proposed project is two-fold:

- To increase SH-75 roadway capacity to accommodate existing peak-hour vehicle traffic and future year 2025 vehicle traffic; and
- To increase transportation safety for all users.

1.1.2 Need

The need for this project is based on several factors:

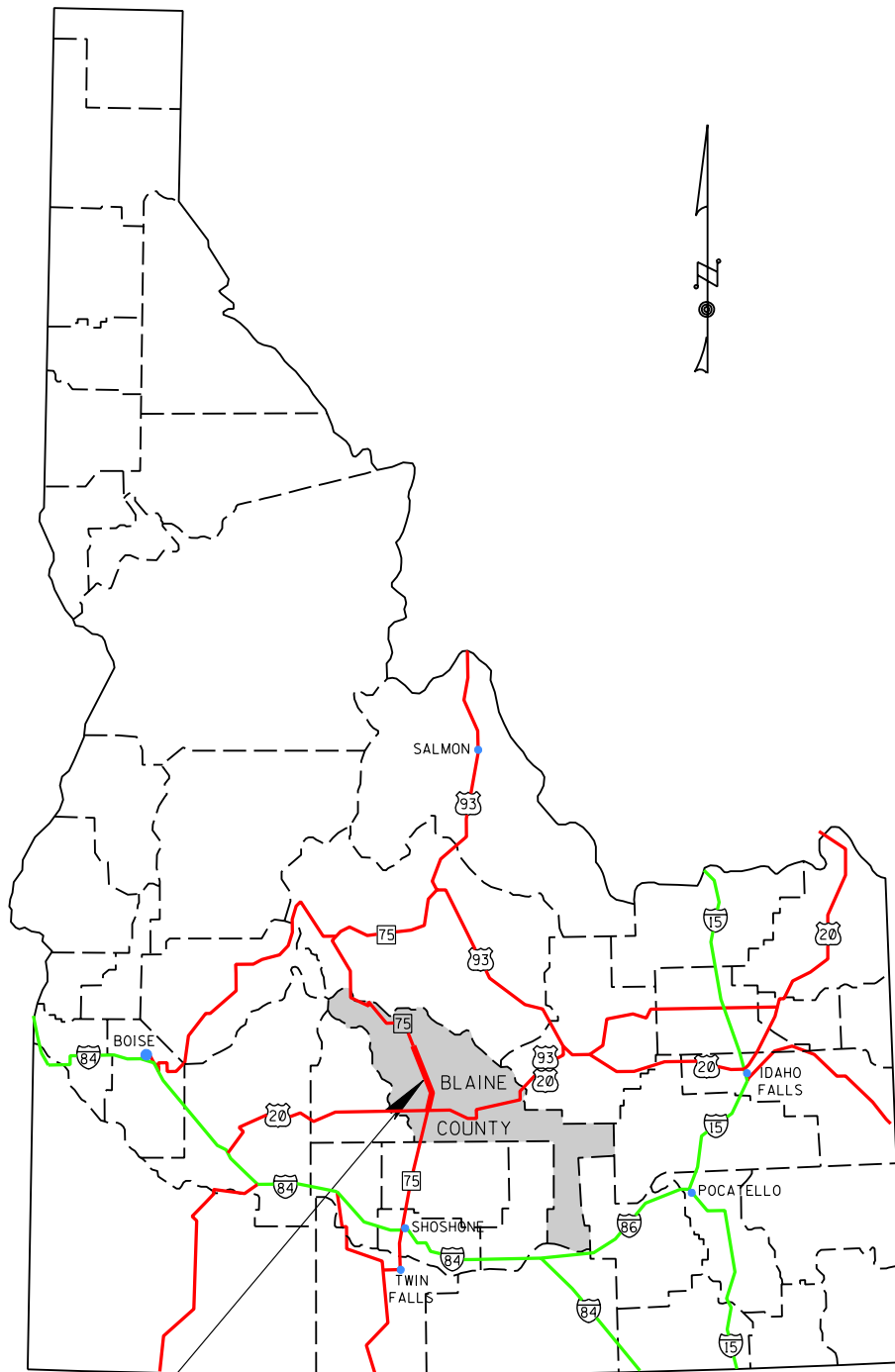
- Current and predicted future year 2025 peak hour travel demand exceeds available transportation capacity. Peak hour congestion is primarily from commuters traveling within the project limits.
- Lack of shoulders, lack of right-turn lanes, and lack of center left-turn lanes at intersections create a safety and a capacity concern throughout the SH-75 corridor.
- Pedestrians and bicyclists need safe access across SH-75 to access community resources.
- Current peak hour bus transit and rideshare programs experience peak hour congestion.

In meeting these needs, the project will safely and efficiently move a growing population with diverse needs and resources as well as move goods and materials to and through the Wood River Valley. The project will minimize impacts to scenic, aesthetic, historic, and other environmental resources in accordance with National Environmental Policy Act (NEPA) and 23 CFR Part 771 *Environmental Impact and Related Procedures*. SH-75 has "Main Street" characteristics through the Cities of Bellevue, Hailey and Ketchum that need to be maintained. The SH-75 project will use the existing highway corridor to help preserve future transportation options.

The SH-75 study corridor begins at the Timmerman Rest Area junction with US 20 (SH-75 milepost 102.1) and ends in Ketchum at Saddle Road (SH-75 milepost 129.25). Page 1-1, line 34 of the DEIS incorrectly indicated that the project ends at Warm Springs Junction (SH-75 milepost 128.5). This is the only location in the DEIS where this error occurs. Saddle Road is consistent with the Notice of Intent issued for the project on October 4, 2000 and is still valid.

Figure 1-1 illustrates the project location within the State of Idaho; Figure 1-2 shows a vicinity map for the project. The corridor is approximately 27 miles long.

⁴ Chapter 1 of the Draft Environmental Impact Statement provides a complete analysis of existing and future No-Build conditions, crash analysis, and analysis of existing and future needs.



STP-F-2392(035)
SH-75, TIMMERMAN TO KETCHUM

SH-75 Timmerman to Ketchum Final EIS

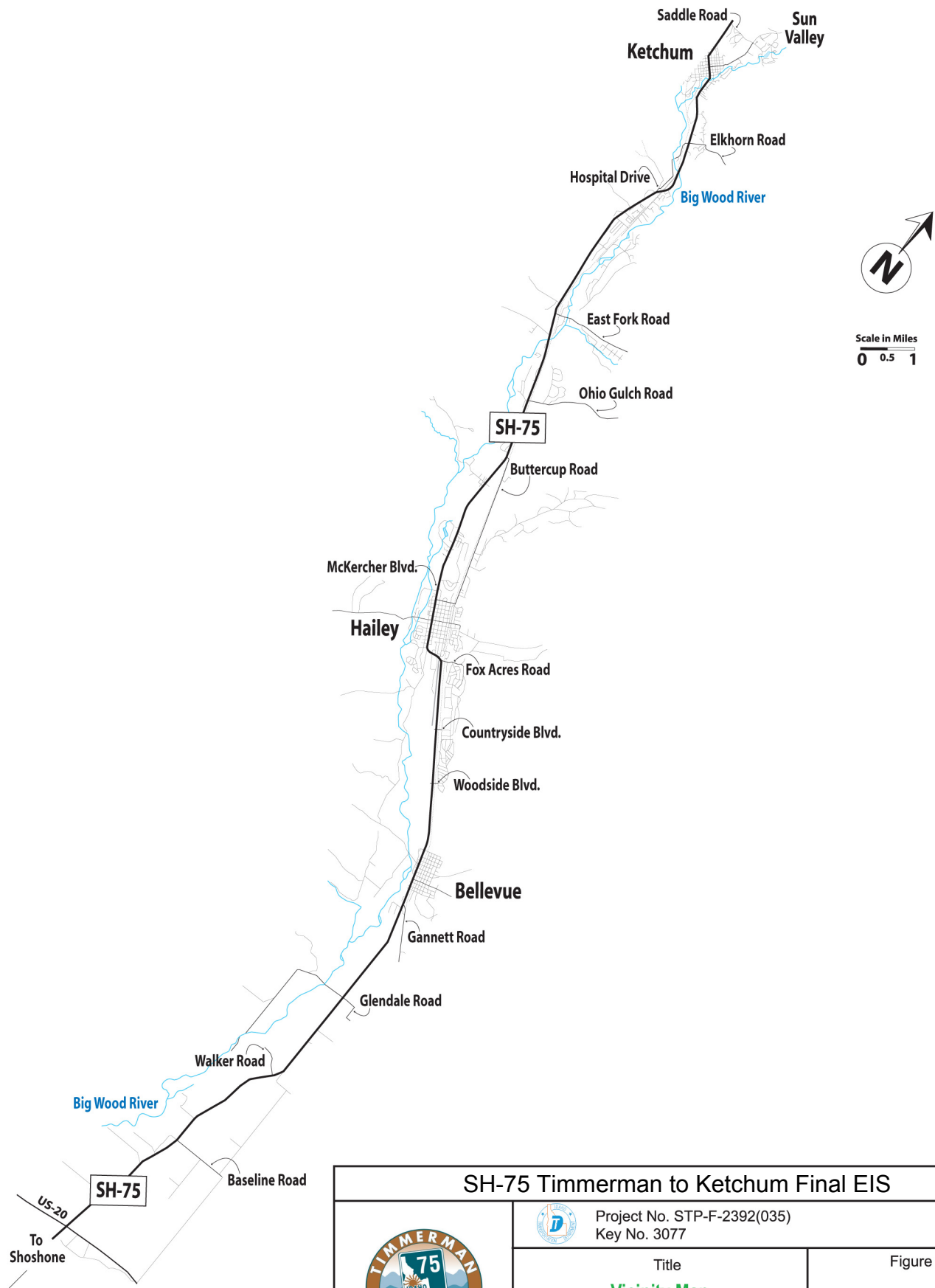


Project No. STP-F-2392(035)
Key No. 3077

Title
Project Location

Figure
1-1

Date: February 2008



SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

Title
Vicinity Map

Figure

1-2

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1.2 Project Programming and Funding

The DEIS listed several projects in the SH-75 corridor on the then applicable Statewide Transportation Improvement Program (STIP). Since publication of the DEIS, ITD has developed a new planning program, "Horizons in Transportation" that is a long-range transportation plan. As well, an updated 2008-2012 STIP is approved, as of the date of publication of this FEIS.

The discussion in the DEIS under 1.1.3 "Statewide Transportation Improvement Program" and Table 1-1 on page 1-4 of the DEIS is replaced by the following discussion.

1.2.1 Idaho Horizons Long Range Capital Improvement & Preservation Program (LRCIP)

The Idaho Transportation Department is implementing a Long Range Capital Improvement and Preservation Program (LRCIP) called "Horizons in Transportation". The LRCIP complements and provides the transition between the shorter five year project development and implementation years of the STIP and the longer 2034 Idaho Transportation Vision. The current LRCIP was formulated in September 2006.

The LRCIP is intended to become the long range planning process for the identification and development of STIP projects. It is organized into three "horizons" – near horizon (6 to 10 years), mid horizon (11 to 15 years out), and far horizon (16 years and beyond).

The Near Horizon includes the reconstruction and realignment of SH-75 between Bellevue and Hailey, listed as Key #7836. This project falls within the logical termini and study area of the DEIS and is consistent with the improvements that were identified and evaluated in the DEIS.

1.2.2 Statewide Transportation Improvement Program (STIP)

SH-75 Timmerman to Ketchum was listed as Key #3077 on the STIP at the inception of the NEPA process in 2000.

ITD's current Fiscal Year 2008-2012 Statewide Transportation Improvement Program contains a project to acquire right-of-way for the Timberway to Hospital Drive portion of SH-75. The project is Key #07836. This project falls within the logical termini and study area of the DEIS and the improvements have been identified and evaluated in the DEIS.

1.2.3 Federal Funding

Public Law 109-59 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU) allocates funding for the SH-75 Timmerman to Ketchum project. SAFETEA-LU is the federal transportation funding authorization bill signed into law on August 10, 2005; it provides funding for the fiscal years 2005 to 2009.

Three sections of SAFETEA-LU allocate a total of \$22.8 million for the SH-75 project evaluated in this EIS:

- Section 1702 High Priority Project #968 "Improve SH-75 from Timmerman to Ketchum" provides \$4.8 million
- Section 1702 Project #4038 "Transportation Improvements to Improve SH-75, Timmerman to Ketchum" provides \$16 million; and
- Section 1934(1)(2) Project #140 "Transportation Improvements to Improve SH-75, Timmerman to Ketchum" provides \$2 million

The \$22.8 million authorized by SAFETEA-LU will be used to advance a portion of the SH-75 project, as described in Section 2.3 Phasing of the Preferred Alternative of this FEIS.

1.2.4 Future Funding

The reconstruction of SH-75 described in this FEIS is expected to occur over many years, in response to the availability of federal and state funding and as envisioned in ITD's "Horizons in Transportation".

Three federal transportation funding bills have been authorized since the early 1990's: Intermodal Surface Transportation Efficiency Act (ISTEA) for fiscal years 1992 to 1997; Transportation Equity Act for the 21st Century for fiscal years 1998 to 2003 (TEA-21); and SAFETEA-LU. Table 1-1 shows the funding allocated to the State of Idaho from the last two funding bills.

Table 1-1: Federal Highway Funding for the State of Idaho

Federal Funding Bill	Year	Idaho Allocation
TEA-21 ⁵	1998	\$174,073,000
	1999	\$203,441,000
	2000	\$208,483,000
	2001	\$209,982,000
	2002	\$213,867,000
	2003	\$217,849,000
SAFETEA-LU	2005	\$260,868,000
	2006	\$264,199,000
	2007	\$278,589,000
	2008	\$288,460,000
	2009	\$291,823,000

SAFETEA-LU, compared to TEA-21, provides the following increase in apportionments as a percentage of TEA-21 Average Annual Apportionment:

FY2005 122.9%

FY2006 124.4%

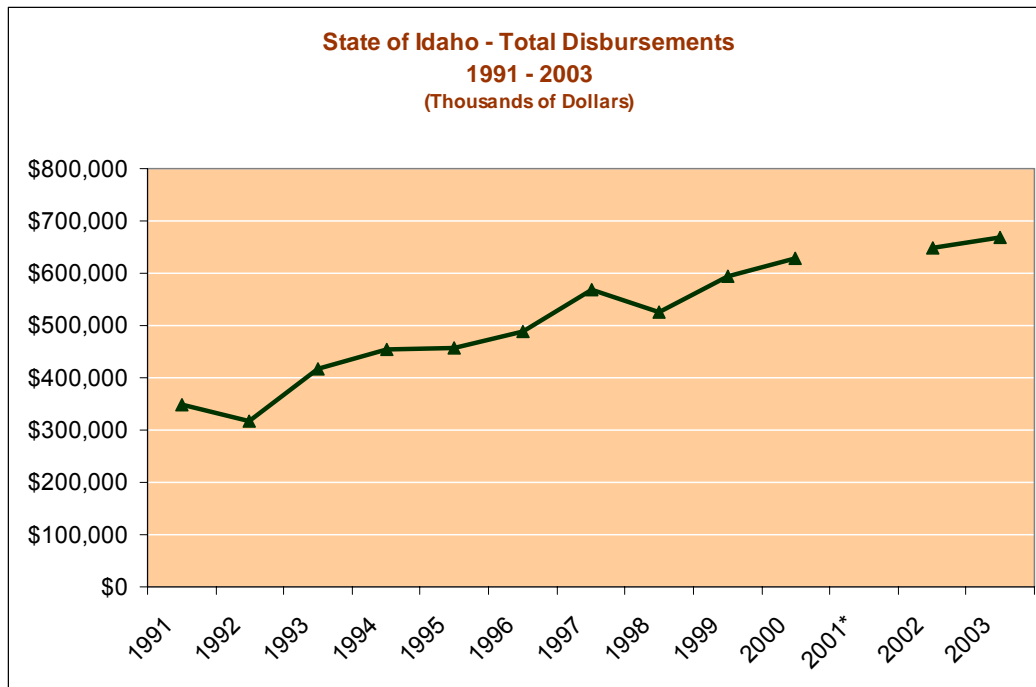
FY2007 131.2%

FY2008 135.9%

FY2009 137.2%

The following graph illustrates the history of funding for highways in the State of Idaho from 1991 to 2003 from all sources, including ISTEA and TEA-21 allocations, state and local funding.

⁵ <http://www.fhwa.dot.gov/tea21/est1200.xls>



Source: <http://www.fhwa.dot.gov/policy/ohim>. Data for 2004 onwards not yet available on website.

* Data for 2001 not included on website.

Based on the history of federal and state funding of highways in the State of Idaho and the total capital expenditures on highways from all government sources, it is reasonable to conclude that federal funding and funding from state and local sources will continue to be available to fund right-of-way acquisition and construction of the SH-75 improvements evaluated in this FEIS.

1.2.5 History of Public/Private Partnerships in Transportation Facility Development

Completion of the SH-75 Timmerman to Ketchum project will also include a continuation of public/private partnerships to contribute to right-of-way acquisition and construction. The Idaho Transportation Department has partnered with both local governments and private development interests to construct portions of transportation facilities in the State.

The Wood River Valley has experienced high levels of sustained population growth, as evidenced by an average annual 4.1% population growth rate over a 30-year period, as shown in Table 3.1-1, page 3-1 of the DEIS. The associated land development has presented opportunities to develop public/private partnerships to implement improvements along the SH-75 corridor. These include:

- Golden Eagle Ranch Estates– Harry Rinker contributed \$500,000 plus highway right-of-way (ROW) and easements to the reconstruction of SH-75 in the Alturas to Timberway Project and its associated pedestrian/bicycle underpass.
- St. Luke's Hospital development – Blaine County contribution matching funds and ROW totaling approximately \$1 million.
- ROW valued at approximately \$75,000 was donated to ITD by Walker Sand and Gravel for a turn bay at Walker Road.
- Hidden Hollow development – Blaine County required the developer to provide a turn bay on SH-75 valued at \$250,000

ITD has also successfully partnered with local governments and development interests on other projects, including:

- I-84/Isaacs Canyon Interchange east of Boise. ITD District 3 partnered with Micron to construct this interchange.
- I-84/Franklin Interchange structure widening in Nampa, ID. ITD District 3 partnered with Micron to widen this structure.
- I-90/Beck Road Interchange between Post Falls and Washington State Line. ITD District 1 is partnering with Cabela's. The project is in development.

1.2.6 History of Phased Implementation of Projects in Idaho

The implementation of projects once a Record of Decision (ROD) or a Finding of No Significant Impact (FONSI) has been issued or a Categorical Exclusion has been approved is frequently accomplished through phasing, particularly of large or complex projects. ITD has successfully constructed projects in phases once a NEPA approval has been issued. Table 1-2 summarizes projects that ITD has phased after a FONSI or approval of a Categorical Exclusion has been approved. The table also includes projects that are in the STIP and/or the LRCIP and will be implemented in phases.

Table 1-2: Phased Idaho Projects

Project Name/Key Number(s)	NEPA Approval (date and type)	Phased Implementation	Status of Phases
Twin Falls Alternative Route Twin Falls, Idaho	Environmental Assessment March 8, 2000 Re-evaluation September 29, 2004	2 phases or more	Phase I completed 2006
US-95 Worley to Mica Coeur d'Alene, Idaho	Environmental Assessment September 18, 2000	4 phases	Final phase under construction
Wye IC – I-84 Boise, Idaho	Environmental Assessment July 9, 1984	3 Phases	Final construction completed
I-84/US-93 Interchange Reconstruction Twin Falls, Idaho	Categorical Exclusion 2001	2 Phases	Phase 1 completed
SH-20 Menan/Lorenzo and Thornton Interchanges	Environmental Assessment, August 9, 2007	2 Phases	Menan/Lorenzo programmed for construction 2009. Thornton IC is in the LRCIP Mid-Horizon.
I-84 Orchard to Eisenman	Environmental Assessment July 7, 2007	8 phases	All phases programmed in the 2008 to 2012 STIP as 8 individual GARVEE projects
US-30 McCammon to Lava	Environmental Assessment, June 3, 2003	6 Phases	All phases programmed in the 2008 to 2012 STIP as 6 individual GARVEE projects. Phase 1 under design.

1.2.7 Funding Conclusion

It is reasonable that the SH-75 project evaluated in this EIS can be funded and constructed based on the following:

- the inclusion of SH-75 project components in the LRCIP and the STIP;
- the existing SAFETEA-LU funding allocation for SH-75;
- the history of growth in federal and state highway funding since 1991;
- ITD's successful partnering with the private sector and local governments to implement transportation projects; and
- ITD's success in implementing phased projects.

1.3 Need for Improvements

The need for improvements for SH-75 was determined by considering existing (year 2001) traffic operations, predicted year 2025 traffic operations, safety and crash analyses, and substandard roadway features.

1.3.1 Existing Traffic Operations

"Traffic" includes all vehicles on the roadway, regardless of the number of occupants. Traffic therefore includes single occupant vehicles, carpools, buses, recreational vehicles, motorcycles, and trucks. All contribute to and are part of the traffic stream.







The method that is used to evaluate traffic operations throughout the United States is one established by the Transportation Research Board. Level of Service (LOS) is the transportation engineering standard in the United States used to compare how a highway currently functions and how it will function in the future, based on traffic and local conditions. There are six categories of LOS, as described in Table 1-1. These range from LOS A, commonly referred to as free flow, to LOS F, commonly referred to as "stop and go" conditions. To arrive at a LOS determination, the Highway Capacity Manual¹ methodology was used. For the SH-75 project, capacity analyses were performed for four selected roadway segments and 16 intersections using traffic movements at the busiest time of the day, the morning peak hour.

Figure 1-3 shows the existing Level of Service by roadway segment and intersection.

¹ Transportation Research Board, National Research Council, Highway Capacity Manual, 2000

1

Table 1-3: Levels of Service

<i>Definitions of Level Of Service (LOS)</i>		
v/c ratio (LOS)	Roadway Segment Operating Characteristics	Visual Example
A	Represents free traffic flow, very few cars on roadway. In the range of free traffic flow, with some other motorists in the traffic stream begins to be noticeable. Some time spent following slower vehicles but appropriate gaps in traffic allows for passing with little delay.	
B	In the beginning range of traffic flow in which the operation of individual motorists becomes significantly affected by other motorists in the traffic stream. Time spent following slower vehicles is longer and occurs more frequently, but appropriate gaps in traffic allows for passing with moderate delay.	
C	Represents high-density traffic flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Time spent following slower vehicles is noticeably longer and occurs more frequently, and there are fewer gaps in traffic to allow for passing, increasing overall delay.	
D	Represents operating conditions at or above the capacity level. All speeds are reduced to a low and relatively uniform speed. Time spent following slower vehicles exceeds time not behind slower vehicles, and there are few if any gaps in traffic to allow for passing.	
E	Used to define intermittent stopping and moving at a very reduced speed. This condition exists wherever the amount of traffic exceeds the capacity of that point. Time spent following slower vehicles approaches 100 percent of the time traveling on a roadway segment, and there are likely no gaps in traffic to allow for passing.	
F		
Source: Transportation Research Board, Highway Capacity Manual / (HCM) 2000, Pg. 10-5.		

2 **1.3.2 Social, Economic and Multi-modal Needs**

3 SH-75 is the only continuous roadway link in the Wood River Valley. Its function and operation have
4 implications for social, economic, and other aspects of the communities that it serves. It serves a wide
5 variety of users for many different trip purposes. The highway is the primary route for emergency services
6 vehicles and provides access to St. Luke's Hospital. Access to many recreational opportunities depends
7 upon SH-75.

8 SH-75 plays an important role in facilitating multi-modal transportation, including public transportation,
9 bicycling, and access to Friedman Memorial Airport in the City of Hailey. Pedestrian access along and
10 across SH-75 is an issue for local residents and businesses, both in the more rural areas as well as within
11 the cities of Bellevue, Hailey and Ketchum.

1 **1.3.2.1 History of Transit Development in Wood River Valley**

2 When this NEPA process was initiated in October 2000, the only public transit service within the study area
3 was KART (Ketchum Area Rural Transit), operating within the Cities of Ketchum and Sun Valley. Blaine
4 County commissioned a transit feasibility study; the resultant Blaine County Transit Feasibility Study was
5 published in 2001. It outlined a series of transit steps that the Wood River Valley communities could take to
6 initiate transit service and continue its development.

7 Peak Bus Commuter service was subsequently started in June 2002, with 3 daily trips between Bellevue
8 and Ketchum during the morning peak period and 3 during the evening peak period. Four years later, Peak
9 Bus and KART were merged in June 2006. The merger of Wood River Rideshare, the local rideshare entity,
10 with Peak Bus and KART into one regional transit authority was completed in August 2007. The resultant
11 new Mountain Rides Transportation Authority was made official in October 2007
12 (<http://www.mountainrides.org>).

13 **1.3.2.2 Transit Services Provided**

14 From the initial six peak hour trips provided by Peak Bus in 2002, the provision of transit service has grown
15 and its ridership has increased substantially. The following services are now provided in the Wood River
16 Valley:⁷

- 17 • Peak Bus is now known as Down Valley service and monthly ridership averages 6500 riders per
18 month, up over 50% from one year ago.
- 19 • Weekday bus service has been increased to six one-way trips going north in the morning and six
20 coming south in the evening.
- 21 • Weekend bus service has been introduced, with six roundtrips on Saturday and five on Sunday.
- 22 • Free fare zones within the City of Hailey and from St. Luke's Hospital into Ketchum were
23 introduced.
- 24 • A reduced fare of \$1 between Hailey and Bellevue was introduced. The normal fare between
25 Bellevue and Ketchum is \$2.25 for an adult.
- 26 • Four vans were purchased and four vanpools now operate from Twin Falls, Jerome, and Shoshone
27 areas. These cities and town are located 70 miles, 61 miles, and 40 miles, respectively, south of
28 the City of Hailey in the Wood River Valley. The vanpool service has been in place for one year
29 and has a ridership of 1500 to 1700 rides per month.

30 All these transit services use SH-75.

31 Mountain Rides has recently added the City of Hailey to the board of the regional transportation
32 organization, joining Sun Valley, Ketchum, Blaine County, and Bellevue. The transportation authority has
33 adopted a new vision, mission, and goals for the organization to create a regional, multi-modal "one-stop"
34 shop for all transportation modes. As up November 29, 2007, Mountain Rides has adopted a new
35 organization structure that has an Executive Director and department heads. This new structure is expected
36 to move forward more aggressively to increase the use of transportation alternatives (transit and
37 carpooling).

38 This rapid growth in the provision and use of transit services, and in the organizational structure that
39 provides the services, demonstrates the commitment of the Wood River Valley communities to the role of
40 transit and carpooling in meeting their existing and future transportation needs.

⁷ Information and data provided by Jason Miller, Executive Director, Mountain Rides Transportation Authority,
December 2007.

1.3.3 *Summary of Needs*

An analysis of the existing roadway features was a component of identifying the need for improvements on SH-75.

The definition of substandard roadway geometry is based upon the highway design standards established by the American Association of State Highway and Transportation Officials (AASHTO) and those contained in the Idaho Transportation Department Design Manual. Roadway geometry includes the horizontal alignment (how the roadway curves horizontally and the ability to safely accommodate vehicle travel for a given roadway classification), vertical alignment (changes in grade or how the roadway curves up and down) and their impact on sight distance. Sight distance and intersection sight distance is the distance a driver can see down the highway that allows a driver to stop or slow if a vehicle turns in front of it; or, a distance that allows adequate time for a driver on a cross street to decide if it is safe to turn onto or cross SH-75.

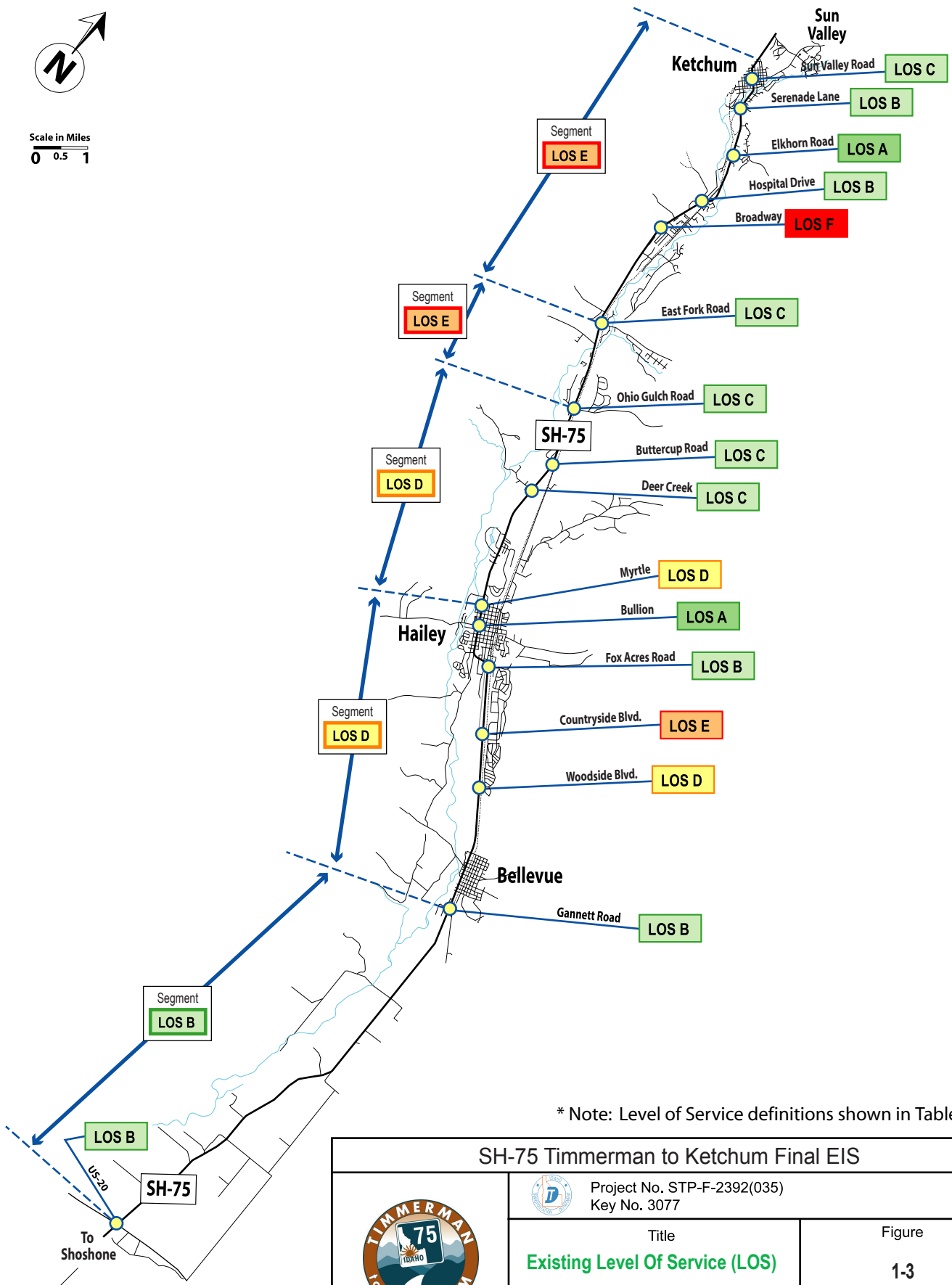
Width of shoulders is an important component of roadway geometry and safety; AASHTO recommends a usable shoulder width of 8 feet for rural arterial roadways with traffic volumes of 2,000 vehicles per day or more. Clear zone is another important component. AASHTO defines a clear zone and recovery area for roadways depending on traffic volumes and design speeds. The clear zone provides an unobstructed area adjacent to the roadway that allows errant vehicles to safely recover or stop if they leave the traveled way. This area should be free of obstructions and have slope upon which a vehicle can recover.

Sections of the existing SH-75 where there is inadequate storm water drainage can result in ponding that can create adverse driving conditions, including hydroplaning, and potential safety issues during inclement weather.

Field observations and review of the aerial mapping for SH-75 were used to identify areas of the existing highway that are substandard. Figures 1-4 through 1-8 summarize the existing and future Level of Service, substandard roadway geometry, substandard drainage and High Accident Locations for SH-75. In combination, these characteristics contribute to the need for improvements to SH-75.



Scale in Miles
0 0.5 1



* Note: Level of Service definitions shown in Table 1-1

SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

Title
Existing Level Of Service (LOS)

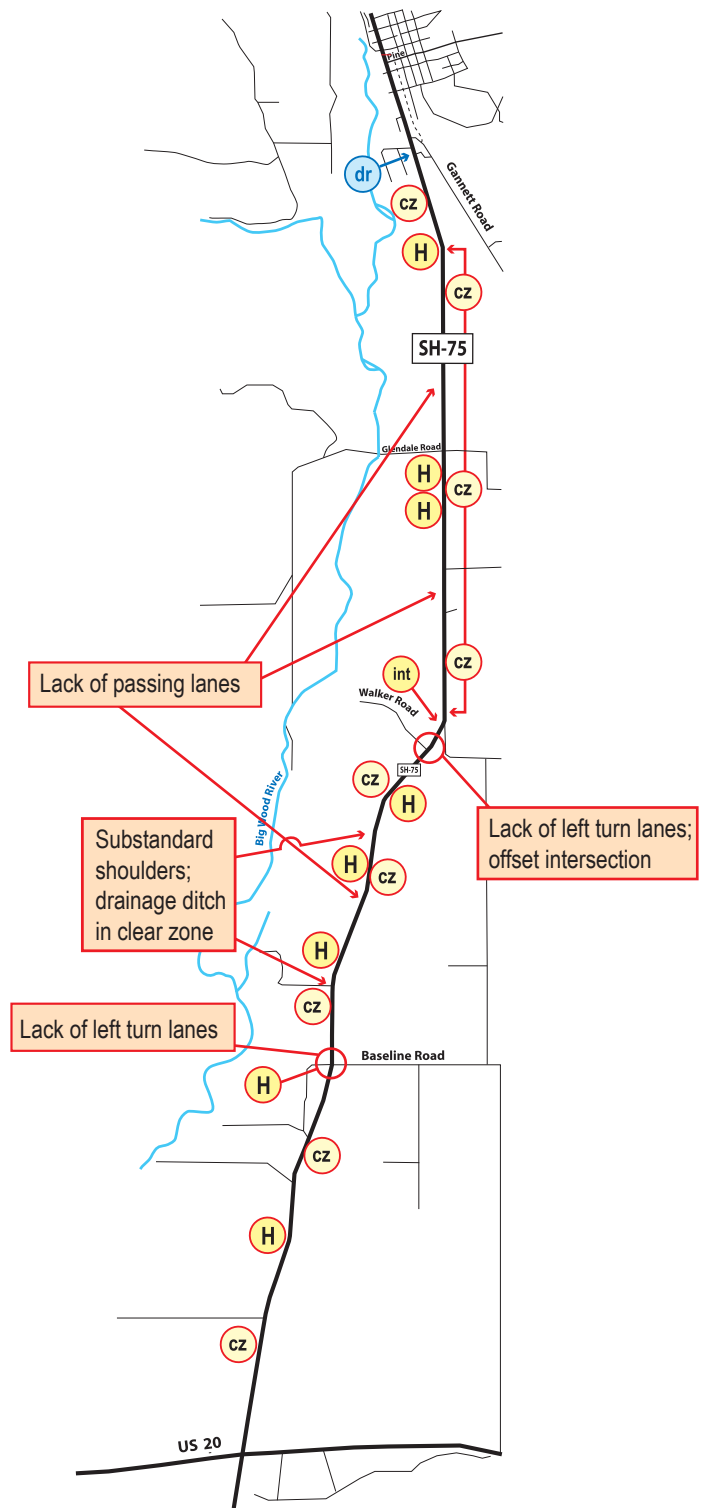
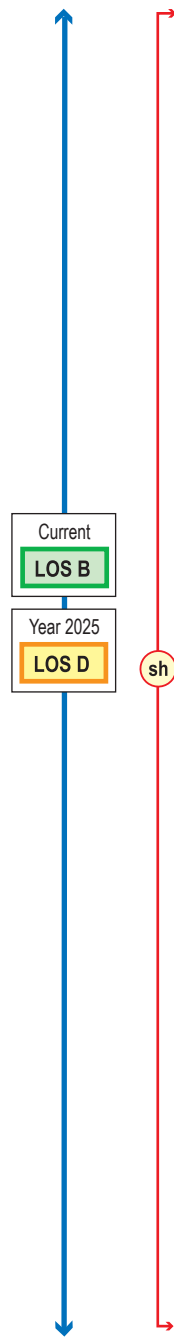
Figure

1-3

Date: *February 2008*

Guide to Symbols

-  Substandard Horizontal Curve
-  Substandard Vertical Curve
-  Substandard Intersection Sight Distance
-  Substandard Shoulder
-  Substandard Clear Zone/Roadside Obstruction
-  Substandard Drainage



SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

Title
Summary of Needs
Segment: US-20 to Gannett Road

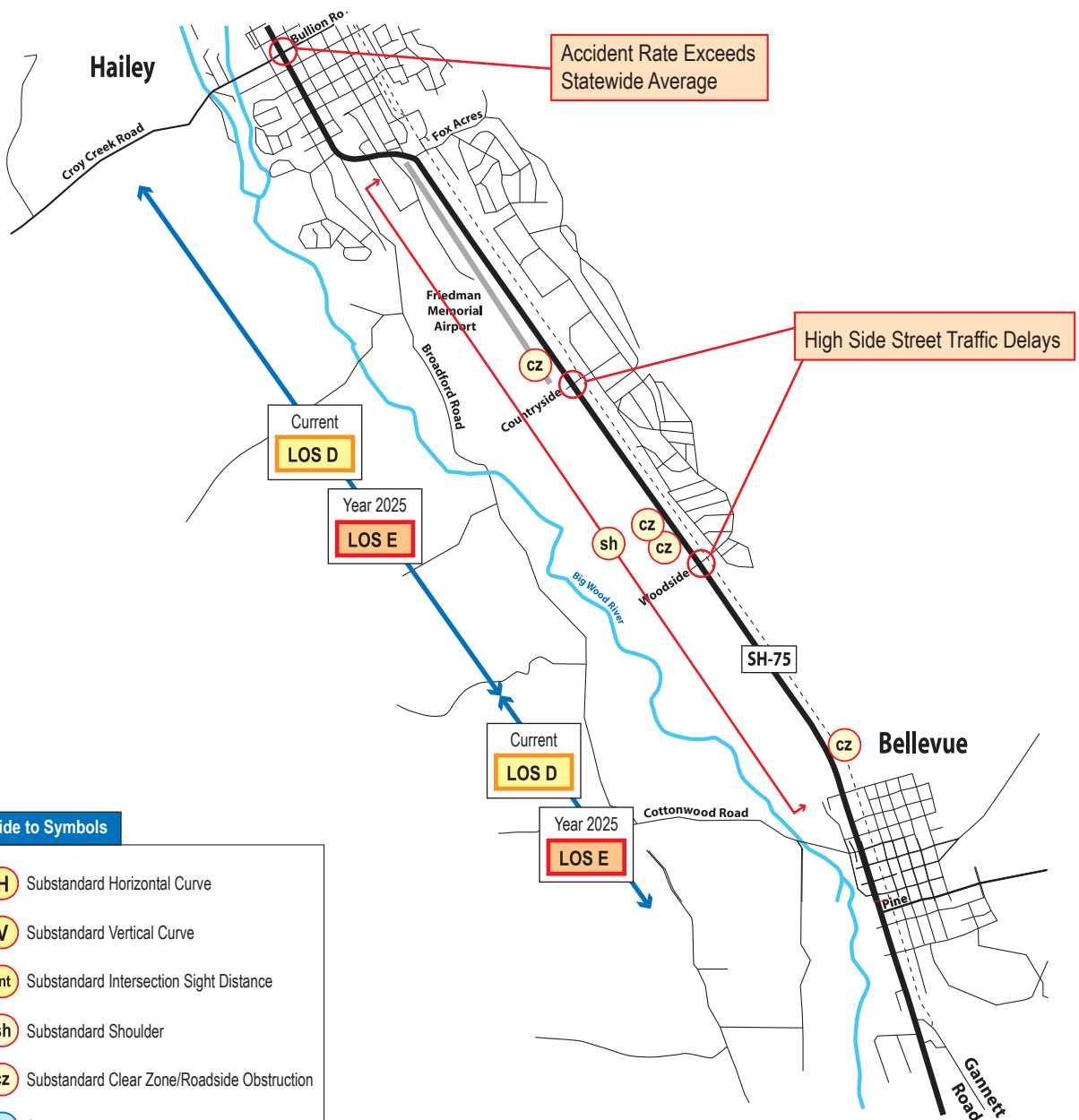
Figure

1-4

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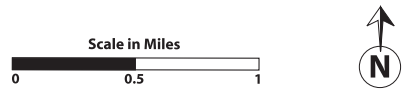
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Guide to Symbols

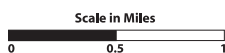
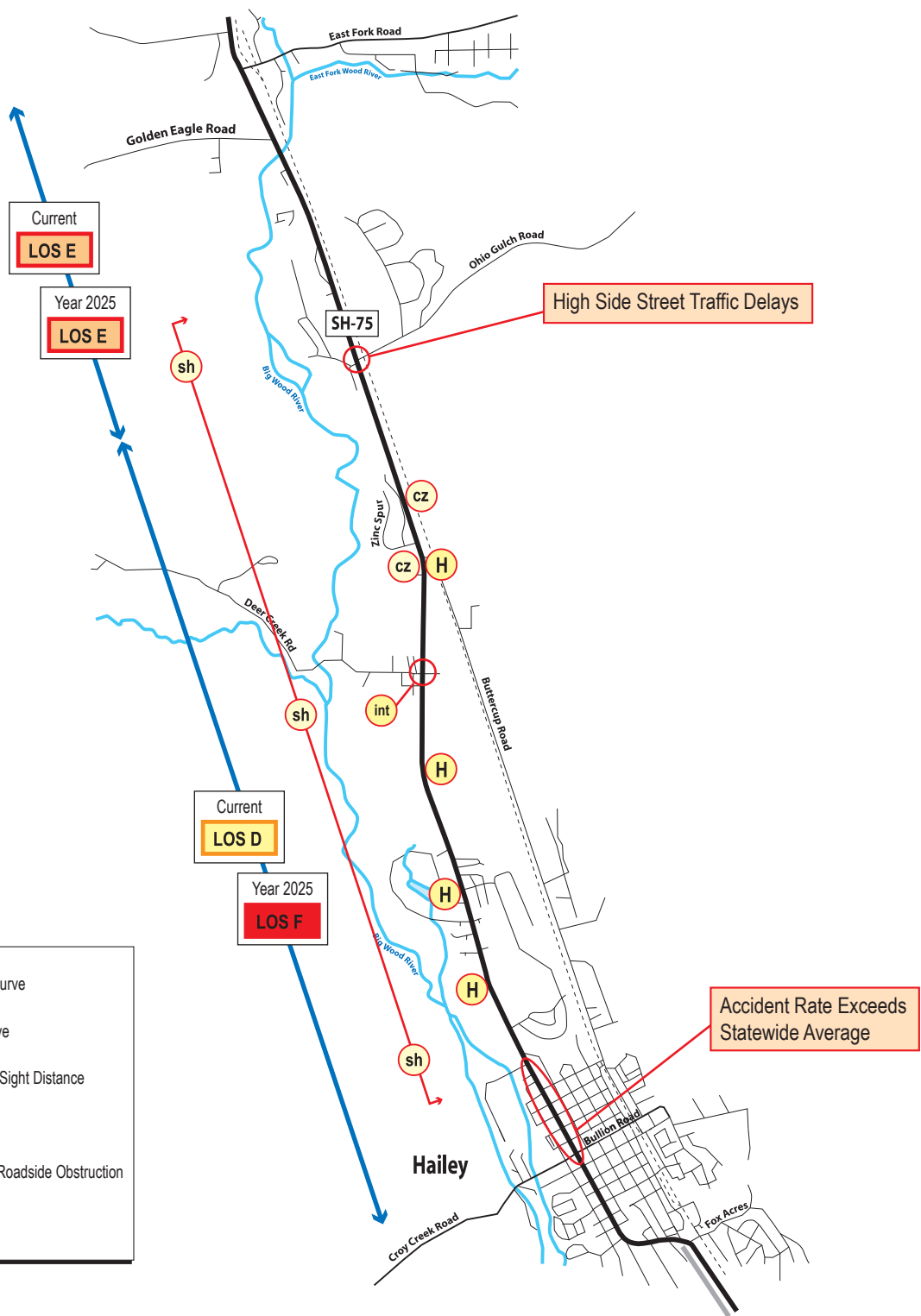
- H** Substandard Horizontal Curve
- V** Substandard Vertical Curve
- int** Substandard Intersection Sight Distance
- sh** Substandard Shoulder
- CZ** Substandard Clear Zone/Roadside Obstruction
- dr** Substandard Drainage



SH-75 Timmerman to Ketchum Final EIS		
	Project No. STP-F-2392(035) Key No. 3077	
	Title Summary of Needs <i>Segment: Gannett Road to Fox Acres</i>	Figure 1-5
	Date: <i>February 2008</i>	

Guide to Symbols

- H** Substandard Horizontal Curve
- V** Substandard Vertical Curve
- int** Substandard Intersection Sight Distance
- sh** Substandard Shoulder
- cz** Substandard Clear Zone/Roadside Obstruction
- dr** Substandard Drainage



Project No. STP-F-2392(035)
Key No. 3077

Title
Summary of Needs
Segment: Fox Acres to East Fork Rd.

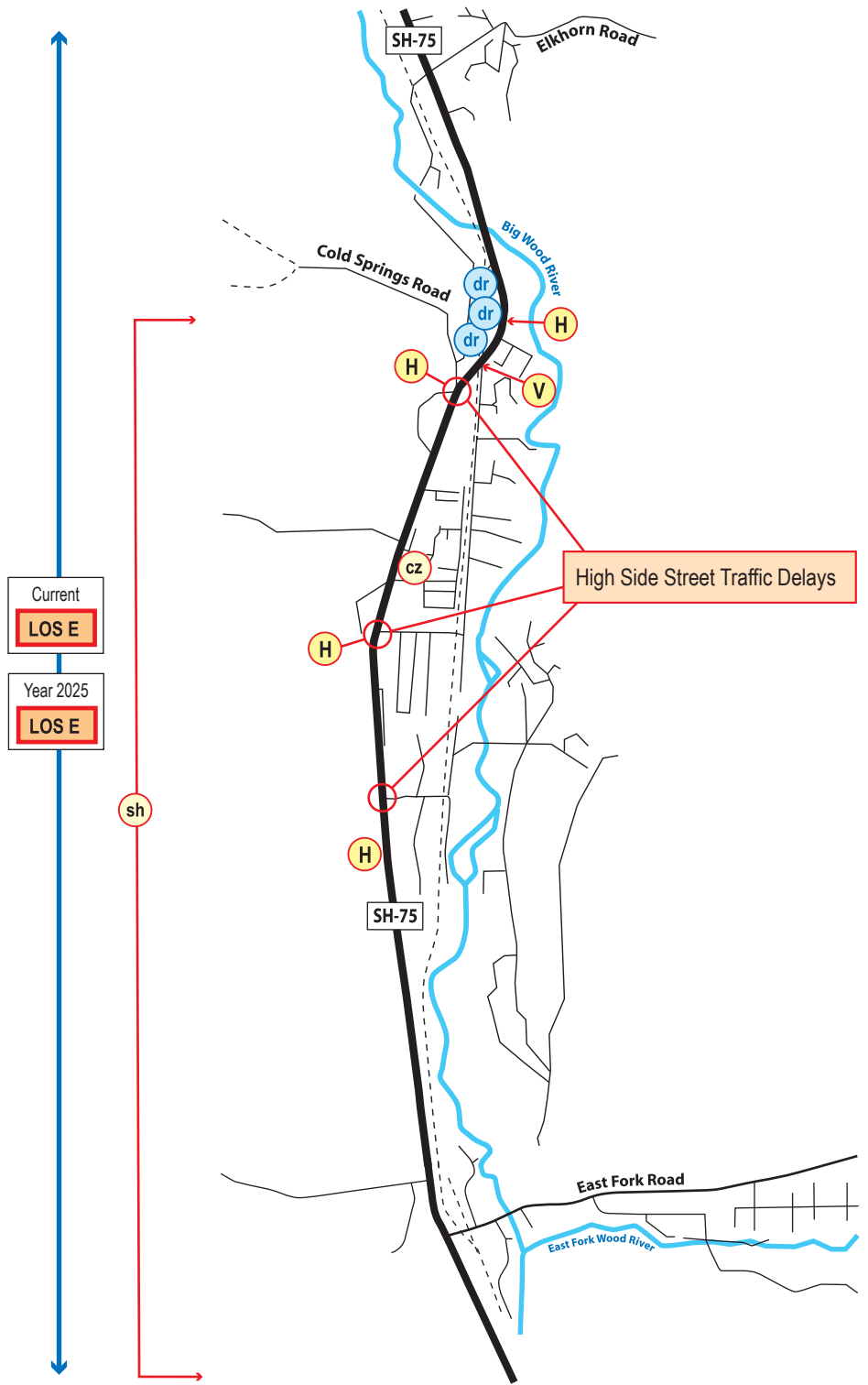
Figure

1-6

Date: *February 2008*

Guide to Symbols

-  Substandard Horizontal Curve
-  Substandard Vertical Curve
-  Substandard Intersection Sight Distance
-  Substandard Shoulder
-  Substandard Clear Zone/Roadside Obstruction
-  Substandard Drainage



Scale in Miles
0 0.5 1



SH-75 Timmerman to Ketchum Final EIS



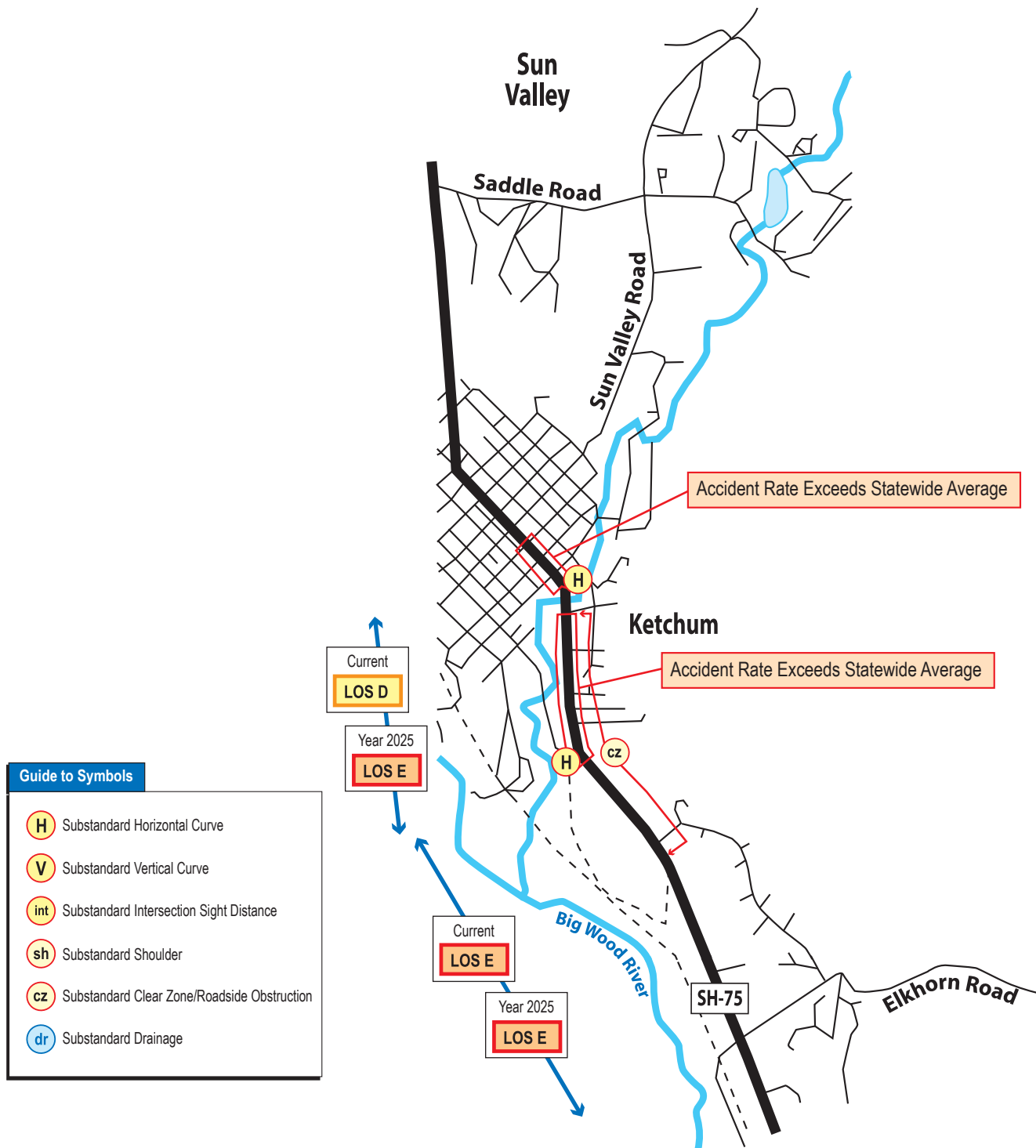
Project No. STP-F-2392(035)
Key No. 3077

Title
Summary of Needs
Segment: East Fork to Elkhorn Rd.

Figure

1-7

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SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

Title
Summary of Needs
Segment: Elkhorn to Saddle Road

Figure
1-8

Date: *February 2008*

